CLAIMS

What is claimed is:

1. A system for making computing applications throughout an enterprise aware of business events comprising:

    a) an enterprise integration layer that automatically publishes business events comprising:

    a1) a set of client access interfaces coupled to front-office applications wherein the interfaces transform data from the format of the front-office applications to a common data format;

    a2) a business object server coupled to the client access interfaces wherein the business object server performs object assembly and disassembly, caching and synchronization, and service invocation functions;

    a3) a set of adapters coupled to the business object server wherein the adapters transform business objects created by the business object server into data requests compatible with a back-office system; and

    a4) an enterprise object model to standardize business objects; and

    b) a messaging system coupled to the enterprise integration layer that automatically subscribes to business events published by the enterprise integration layer and automatically makes the computing applications aware of the business events.

2. The system of claim 1 further comprising a rules engine within the enterprise integration layer to define and store rules regarding validation and data integrity, data and service access, event notification, and caching.

3. The system of claim 1 further comprising a business event repository within the enterprise integration layer to contain definitions of business events.

4. The system of claim 1 further comprising a back-office metadata repository within the enterprise integration layer to hold metadata supplied by the adapters.

5. The system of claim 1 further comprising a transaction processor within the enterprise integration layer to provide distributed transactional quality of service.

6. The system of claim 1 further comprising a local data store within the enterprise integration layer to make data persistent within the enterprise integration layer.

7. The system of claim 1 wherein the client access interfaces comprise:
    an object interface;
    a relational interface; and
    a web services interface.

8. The system of claim 1 wherein the enterprise integration layer uses previously existing infrastructure services within the enterprise.

9. The system of claim 8 wherein the previously existing infrastructure services are selected from a group of services comprising:
    a naming and directory service;
    a security service; and
    an application management and monitoring system.

10. The system of claim 9 wherein the previously existing infrastructure services include each of a group of services comprising:
    a naming and directory service;
    a security service; and
    an application management and monitoring system.

11. A system for making computing applications throughout an enterprise aware of business events comprising:

    a) an enterprise integration layer that automatically publishes business events comprising:

    a1) a set of client access interfaces coupled to front-office applications wherein the interfaces transform data from the format of the front-office applications to a common data format;

    a2) a business object server coupled to the client access interfaces wherein the business object server performs object assembly and disassembly, caching and synchronization, and service invocation functions;

    a3) a set of adapters coupled to the business object server wherein the adapters transform business objects created by the business object server into data requests compatible with a back-office system; and

    a4) a rules engine to define and store rules regarding validation and data integrity, data and service access, event notification, and caching; and

    b) a messaging system coupled to the enterprise integration layer that automatically subscribes to business events published by the enterprise integration layer and automatically makes the computing applications aware of the business events.

12. The system of claim 11 further comprising an enterprise object model within the enterprise integration layer to standardize business objects.

13. The system of claim 11 further comprising a business event repository within the enterprise integration layer to contain definitions of business events.

14. The system of claim 11 further comprising a back-office metadata repository within the enterprise integration layer to hold metadata supplied by the adapters.

15. The system of claim 11 further comprising a transaction processor within the enterprise integration layer to provide distributed transactional quality of service.

16. The system of claim 11 further comprising a local data store within the enterprise integration layer to make data persistent within the enterprise integration layer.

17. The system of claim 11 wherein the client access interfaces comprise:
    an object interface;
    a relational interface; and
    a web services interface.

18. The system of claim 11 wherein the enterprise integration layer uses previously existing infrastructure services within the enterprise.

19. The system of claim 18 wherein the previously existing infrastructure services are selected from a group of services comprising:
    a naming and directory service;
    a security service; and
    an application management and monitoring system.

20. The system of claim 19 wherein the previously existing infrastructure services include each of a group of services comprising:
    a.naming and directory service;
    a security service; and
    an application management and monitoring system.

21. A system for making computing applications throughout an enterprise aware of business events comprising:

    a) an enterprise integration layer that automatically publishes business events comprising:

    a1) a set of client access interfaces coupled to front-office applications wherein the interfaces transform data from the format of the front-office applications to a common data format;

    a2) a business object server coupled to the client access interfaces wherein the business object server performs object assembly and disassembly, caching and synchronization, and service invocation functions;

    a3) a set of adapters coupled to the business object server wherein the adapters transform business objects created by the business object server into data requests compatible with a back-office system; and

    a4) a business event repository to contain definitions of business events; and

    b) a messaging system coupled to the enterprise integration layer that automatically subscribes to business events published by the enterprise integration layer and automatically makes the computing applications aware of the business events.

22. The system of claim 21 further comprising an enterprise object model within the enterprise integration layer to standardize business objects.

23. The system of claim 21 further comprising a rules engine within the enterprise integration layer to define and store rules regarding validation and data integrity, data and service access, event notification, and caching.

24. The system of claim 21 further comprising a back-office metadata repository within the enterprise integration layer to hold metadata supplied by the adapters.

25. The system of claim 21 further comprising a transaction processor within the enterprise integration layer to provide distributed transactional quality of service.

26. The system of claim 21 further comprising a local data store within the enterprise integration layer to make data persistent within the enterprise integration layer.

27. The system of claim 21 wherein the client access interfaces comprise:
    an object interface;
    a relational interface; and
    a web services interface.

28. The system of claim 21 wherein the enterprise integration layer uses previously existing infrastructure services within the enterprise.

29. The system of claim 28 wherein the previously existing infrastructure services are selected from a group of services comprising:
    a naming and directory service;
    a security service; and
    an application management and monitoring system.

30. The system of claim 29 wherein the previously existing infrastructure services include each of a group of services comprising:
    a naming and directory service;
    a security service; and
    an application management and monitoring system.

31. A method for a source computing application within an enterprise making a target computing application within the enterprise aware of a business event comprising:

   identifying business events within the enterprise;

   creating a common format for the business events;

   storing the business events in a repository;

   modifying the source application to signal that a business event has occurred;

   an adapter coupled to the source application publishing the business event in the common format;

   the adapter coupled to the source application transforming data related to the business event from its native format to a standard format;

   the adapter coupled to the source application publishing the data in the standard format;

   an adapter coupled to the target application subscribing to the business event; and

   the adapter coupled to the target application transforming the data from the standard format to its native format.

32. The method of claim 31 wherein the business event and the data related to the business event are combined in a single packet.

33. The method of claim 31 wherein the business event and the data related to the business event are published to a message bus.

34. The method of claim 31 wherein the business event and the data related to the business event are published to a message queue.

35. The method of claim 31 wherein the business event and the data related to the business event are made available to the enterprise through a messaging system.